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09/925,399	08/09/2001	Dennis Duenke	MPH 4740.1	4485
321	7590	10/07/2005	EXAMINER	
SENNIGER POWERS LEAVITT AND ROEDEL ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102			JABR, FADEY S	
			ART UNIT	PAPER NUMBER
			3639	

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/925,399

Applicant(s)

DUENKE, DENNIS

Examiner

Fadey S. Jabr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/2001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: the claim appears to have repeated the word “the” in line 1 of the claim. Also, in claim 24, line 3, “an” should be replaced by “a”. Additionally, claims 13 and 14 appear to have omitted the word “claim” directly preceding the claim number. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural

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phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. A claim limited to a machine or manufacture which has practical application in the technological arts is statutory. In most cases, a claim to a specific machine or manufacture will have practical application in the technological arts. See MPEP 2106, 2100-14 (quoting *In re Alappat*, 33 F.3d at 1544, 31 USPQ2d at 1557). Additionally, for subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea or mathematical algorithm in the technological arts. See *In re Alappat* 33 F.3d at 1543, 31 USPQ2d at 1556-57 (quoting *Diamond V. Diehr*, 450 U.S. at 192, 209 USPQ at 10). For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. See *In re Musgrave*, 431 F.2d 882, 167 USPQ 280 (CCPA 1970).

In the present case, claims **1-26** only recite an abstract idea. The recited steps of merely maintaining, grouping, selecting and calculating items of a database in order to estimate the cost of a construction project does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to estimate the cost of a construction project.

As to technological arts recited in the preamble, mere recitation in the preamble (i.e., intended or field of use) or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case, none of the recited steps are directed to anything

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in the technological arts as explained above with the exception of the recitation in the preamble that the method is "computerized". Looking at the claim as a whole, nothing the body of the claim recites any structure or functionality to suggest that a computer performs the recited steps. Therefore, the preamble is taken to merely recite a field of use.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. An invention, which is eligible or patenting under 35 U.S.C. 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a "use, concrete and tangible result". See *AT&T v. Excel Communications Inc.*, 172 F.3d at 1358, 50 USPQ2d at 1452 and *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d at 1373, 47 USPQ2d at 1601 (Fed. Cir. 1998). The test for practical application as applied by the examiner involves the determination of the following factors"

- (a) "Useful" – The Supreme Court in *Diamond v. Diehr* requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished. Applying utility case law the examiner will note that:
 - i. the utility need not be expressly recited in the claims, rather it may be inferred.
 - ii. if the utility is not asserted in the written description, then it must be well established.
- (b) "Tangible" – Applying *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct

claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of an abstract idea and therefore, is nonstatutory under 35 U.S.C. 101. In *Warmerdam* the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium, which enabled its functionality to be realized.

- (c) “Concrete” – Another consideration is whether the invention produces a “concrete” result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

In the present case, the claimed invention calculates estimates for many construction projects (i.e., repeatable) used in determining the most accurate cost estimate (i.e., useful and tangible).

Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-26 is deemed to be directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 5, 24-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Elliott, U.S. Patent No. 6,446,053 B1.

As per Claim 1, Elliott discloses a method for estimating material and labor costs of a construction project comprising:

- maintaining a first database of items and cost data associated with each of the items (Col. 2, lines 40-46);
- grouping one or more of the items from the first database to define predetermined sets of items, each of said predetermined sets of items corresponding to a desired installation of the grouped items (Col. 2, lines 55-57);
- selecting one or more of the sets of grouped items based on the construction project (Col. 2, lines 55-57); and
- calculating the estimated cost of the construction project based at least in part upon the cost data associated with the items in the selected set of grouped items (Col. 2, lines 60-63).

As per Claim 5, Elliott discloses a method wherein the grouped items are selected from the group consisting of heating, ventilation, and air conditioning equipment and associated hook-up materials; plumbing fixtures, equipment, foundry, structural supports, and associated hook-up

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materials; and electrical fixtures, equipment, and associated hook-up materials

(Col. 8, lines 57-65; Table 1).

As per **Claim 24**, Elliott discloses a system estimating a cost of selected equipment for a construction project comprising:

- a. an first database containing construction items and material and labor cost data associated with each of the items (Col. 2, lines 40-46);
- b. a second database containing one or more of the items from the first database that define predetermined sets of grouped items, each of said predetermined sets of grouped items corresponding to a desired installation of the grouped items in the construction project (Col. 2, lines 55-57); and
- c. a computer executing a cost estimating software program and accessing the second database for users to select grouped items, said cost estimating software program retrieving information from the second database, and providing a cost estimate of the construction project based at least in part upon the selected grouped items data (Col. 2, lines 49-63).

As per **Claim 25**, Elliott discloses a system further comprising graphical illustrations of grouped items wherein the computer executing a cost estimating software program displays graphical illustrations of the selected grouped items (Col. 2, lines 55-63; Col. 6, lines 57-62).

As per **Claim 26**, Elliott discloses a system wherein the items and sets of grouped items are stored in a common database (Col. 2, lines 55-57).

As per **Claim 27**, Elliott discloses a system wherein the software program provides a series of instructions that prompt a user to enter appropriate estimate data (Col. 2, lines 49-57).

As per **Claim 28**, Elliott discloses a system wherein the software program estimates construction project costs for selected grouped items and hook-up materials and automatically includes associated equipment and hardware related to the selected grouped items and hook-up materials (Col. 8, lines 59-65).

As per **Claim 29**, Elliott discloses a system wherein the associated equipment and hardware related to the selected grouped items and hook-up materials is defined by a user (Col. 6, lines 57-62).

As per **Claim 30**, Elliott discloses a system for estimating the material and labor costs of a construction project comprising:

- a remote server on a communications network managing software programs and databases (Col. 2, lines 40-51);
- a central database associated with the remote server, said central database storing construction material specifications and graphics, labor cost data, and material pricing data (Col. 6, lines 38-46, 57-62); and
- a local computer on the communications network executing a material and labor cost

estimating program, accessing data from the central database for use by the material and labor cost estimating program, and generating one or more reports for material and labor cost estimates for the construction project (Col. 2, lines 49-63).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **2 and 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott, U.S. Patent No. 6,446,053 B1.

As per **Claim 2**, Elliott discloses all of the limitations in claim 1. Elliott discloses a method further comprising: maintaining a database of graphical representations, each of said graphical representations corresponding to one of the sets of grouped items; and displaying the graphical representation of at least one set of grouped items upon selection (Col. 2, lines 51-63; Col. 6, lines 57-62). Elliott fails to disclose a second database comprising of graphical representations. However, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott because there is no criticality disclosed by the applicant as to the use of a plurality of databases for storing cost data and graphical representations.

As per **Claim 3**, Elliott further discloses further comprising identifying sizes and quantities of the grouped items from the displayed graphical representation (Col. 2, lines 55-57; Col. 6, lines 57-62; Col. 8, lines 59-65).

5. Claims **4, and 6-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott, U.S. Patent No. 6,446,053 B1 in view of Broughton et al., U.S. Patent No. 5,920,849.

As per **Claim 4**, Elliott discloses all of the limitations in claim 1. Elliott discloses a method wherein the graphical representation of the grouped items is displayed (Col. 2, lines 55-60; Col. 8, lines 59-65) Elliott though fails to disclose dimensions of hook-up materials are defined by entering dimension units of measure in data boxes associated with the graphical representation of the grouped items. However, Broughton et al. discloses dimensions of hook-up materials are defined by entering dimension units (Col. 2, lines 36-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and allow for defining the dimensions of hook-up materials as disclosed by Broughton et al. because it provides the user with a system that is user friendly by allowing a user to input dimensions into a system in order for the system to output the correct item.

As per **Claim 6**, Elliott discloses all of the limitations in claim 1. Elliott fails to disclose a method wherein the length and size of associated hook-up materials are defined at the time the grouped items are selected. However, Broughton et al. discloses a system wherein the type of

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fitting is selected based on the inputted dimensions at the time of selection (Col. 2, lines 52-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide the user the capability to input length and size of associated materials at the time the grouped items are selected as disclosed by Broughton et al. because that would allow the user to select the exact item from the system.

As per **Claim 7**, Elliott discloses all of the limitations in claim 1. Elliott fails to disclose a method wherein the grouped items comprises at least two fixtures or equipment connected together with coupling materials. However, Broughton et al. discloses items that are connected using fittings (Col. 2, lined 40-45). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide grouped items comprising of least two fixtures connected with coupling materials as disclosed by Broughton et al. because it would be convenient to provide the user with commonly used items comprised of two or more items joined by coupling material.

As per **Claim 8**, Elliott discloses all of the limitations in claim 1. Elliott fails to disclose a method wherein the size of the coupling materials is calculated based at least in part upon stored building code and available coupling material size. However, Broughton et al. discloses calculating the coupling material size according to code requirements (Col. 2, lines 52-54). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and calculate the size of the coupling material according to code

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requirements as disclosed by Broughton et al. because the purpose of building codes is to require construction be built according to those requirements.

As per **Claim 9**, Elliott discloses all of the limitations in claim 1. Elliott fails to disclose a method wherein the calculated size of coupling materials may be manually overridden by a user. However, Broughton et al. discloses overriding the dimensions of an item (Col. 2, lines 58-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide the user with the capability to override the system dimensions as disclosed by Broughton et al. because it provides the user with a system that is user friendly by allowing the user to select specific dimensions based on their construction need.

6. Claims **10-14, 17-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott, U.S. Patent No. 6,446,053 B1 in view of McCormick, U.S. Patent No. 5,893,082.

As per **Claim 10**, Elliott discloses a system having a processor, a graphical user interface including a computer display, and an input device, a method for estimating material and labor costs of a construction project comprising:

- maintaining a first database of items and cost data associated with each of the items (Col. 2, lines 40-46);
- grouping one or more of the items from the first database to define predetermined sets

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of grouped items, each of said predetermined sets of grouped items corresponding to a desired installation of the construction project (Col. 2, lines 55-57);

- calculating the estimated cost of the construction project based at least in part upon the cost data associated with the items in the selected set of grouped items (Col. 2, lines 60-63).

However, Elliott fails to disclose:

- displaying a Take Off Sheet data entry screen on the computer display comprising quantity data cells corresponding to item size;
- entering one or more of the sets of grouped items onto said Take Off Sheet data entry screen based on the construction project.

Nevertheless, McCormick teaches a Take Off Sheer data entry screen on a computer display (Col. 2, lines 42-53). McCormick also discloses entering grouped items into Take Off Sheet data entry screen based on the construction project (Col. 3, lines 18-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide a Take Off Sheet data entry screen on a computer screen display where grouped items could be entered into the Take Off Sheet data entry screen as disclosed by McCormick because it greatly improves the efficiency of the system in providing cost estimates.

As per **Claim 11**, Elliott further discloses a method wherein the selected grouped items is selected from the group consisting of heating, ventilation, and air conditioning equipment and associated hook-up materials; plumbing fixtures, equipment, foundry, structural supports, and associated hook-up materials; electrical fixtures, equipment, and associated hook-up materials;

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industrial process equipment and associated hook-up materials; and fire protection equipment and associated hook-up materials (Col. 8, lines 57-65; Table 1).

As per **Claim 12**, Elliott discloses all of the limitations in claim 10. Elliott fails to explicitly disclose a method wherein the set of grouped items are grouped together according to a graphical representation of the grouped items. However, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and group the set of grouped items according to graphical representation because it would greatly improve the efficiency in locating similar grouped items.

As per **Claim 13**, Elliott further discloses a method further comprising identifying sizes and quantities of the grouped items from the displayed graphical representation (Col. 2, lines 55-57; Col. 6, lines 57-62; Col. 8, lines 59-65).

As per **Claim 14**, Elliott further discloses a method wherein dimensions of grouped items are identified on the graphical representation of the grouped items and stored to a database of pre-defined grouped items.

As per **Claim 17**, Elliott discloses all of the limitations in claim 10. Elliott fails to disclose a method wherein the items comprising the pre-defined grouped items are modified prior to being entered onto said Take Off Sheet data entry screen. However, McCormick discloses modifying items before inputting them into the Take Off Sheet data entry screen

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(Col. 5, lines 40-47). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide the ability to modify an item before entering it into the Take Off Sheet because it would be more convenient for the user to modify the item ahead of entering the item into the system therefore saving the user from having to reenter the modified item into the system.

As per **Claim 18**, Elliott discloses all of the limitations in claim 10. Elliott fails to disclose a method wherein the modified grouped items are stored to the database of pre-defined grouped items. However, McCormick discloses being able to open and close the Take Off Sheet data entry screen encompassing the modified items (Col. 5, lines 60-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide the capability to store the modified items as disclosed by McCormick because it would benefit the user to save the modified item in the case that they would want to reuse the modified item.

As per **Claim 19**, Elliott discloses all of the limitations in claim 10. Elliott fails to explicitly disclose a method wherein two or more sets of grouped items are combined to form a combined set of grouped items. However, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and combine grouped items together to form a set of grouped items because it would greatly improve the efficiency in locating similar grouped items.

As per **Claim 20**, Elliott further discloses a method wherein dimensions of the combined set of grouped items are identified on the graphical representation of the combined grouped items and stored to a database of pre-defined grouped items (Col. 2, lines 55-57).

7. Claims **15, 16, 21, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott, U.S. Patent No. 6,446,053 B1 in view of McCormick, U.S. Patent No. 5,893,082 as applied to claim 10 above, and further in view of Broughton et al., U.S. Patent No. 5,920,849.

As per **Claim 15**, Elliott discloses all of the limitations of claim 10. Elliott fails to disclose a method wherein the dimensions of hook-up materials are defined by entering dimension units of measure in data boxes associated with the graphical representation of the grouped items. However, Broughton et al. discloses defining the dimensions of hook-up materials, which are associated with the graphical representation of the grouped items (Col. 2, lines 36-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide the ability to define dimensions for hook-up materials which are associated with the graphical representation of the grouped items as disclosed by Broughton et al. because it provides the user with a system that is user friendly by allowing the user to define dimensions for hook-up materials based on their construction need, not to mention associating a graphical representation with the hook-up materials.

As per **Claim 16**, Elliott discloses all of the limitations of claim 10. Elliott fails to disclose a method wherein the graphical representation of the grouped items is displayed to the computer display prior to being entered onto said Take Off Sheet data entry screen. However, McCormick discloses displaying graphical representations of items prior to entering them into said Take Off Sheet (Col. 2, lines 44-50). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and display the graphical representation of the item before entering the item into the said Take Off Sheet data entry screen as disclosed by McCormick because it provides the user with a system that is user friendly by allowing the user to examine the graphical representation in order to confirm the item is correct prior to entering the item into the Take Off Sheet data entry screen.

As per **Claim 21**, Elliott discloses all of the limitations of claim 10. Elliott fails to disclose a method wherein the sets of grouped items comprise at least two fixtures or equipment that are connected together with coupling materials. However, Broughton et al. discloses at least two fixtures that are connected together with coupling material (Col. 2, lines 52-60). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and provide grouped items comprising of at least two fixtures or equipment that are connected together with coupling materials as disclosed by Broughton et al. because it would be convenient to provide the user with commonly used items comprised of two or more items joined by coupling material.

As per **Claim 22**, Elliott discloses all of the limitations of claim 10. Elliott fails to disclose a method wherein the coupling material size is calculated by the processor based at least in part according to code requirements. However, Broughton et al. discloses calculating the coupling material size according to code requirements (Col. 2, lines 52-54). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and calculate the size of the coupling material according to code requirements as disclosed by Broughton et al. because the purpose of building codes is to require construction be built according to those requirements.

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elliott, U.S. Patent No. 6,446,053 B1 in view of McCormick, U.S. Patent No. 5,893,082 and Broughton et al., U.S. Patent No. 5,920,849 as applied to claim 10 above, and further in view of Ananian et al., U.S. Patent No. 6,922,701 B1.

As per **Claim 23**, Elliott discloses all of the limitations in claim 10. Elliott fails to disclose a method wherein the code requirements are selected from the group consisting of building codes, plumbing codes, engineering codes, and governmental codes. However, Ananian et al. discloses code requirements are engineering codes (Col. 9, lines 39-42, 57-59). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the method of Elliott and select code requirements from a group consisting of engineering codes as disclosed by Ananian et al. because construction is overseen by a variety of codes, including engineering and governmental codes.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Fad et al., U.S. Patent No. 5,793,632.

Examiner's Note: Examiner has cited particular columns and line numbers in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that the applicant, in preparing the responses, fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadey S. Jabr whose telephone number is (571) 272-1516. The examiner can normally be reached on Mon. - Fri. 7:30am to 4:00pm.

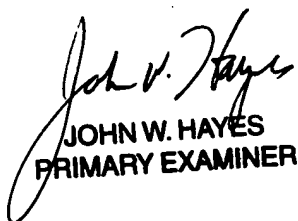
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Hayes can be reached on (571)272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fadey S Jabr
Examiner
Art Unit 3639

FSJ


JOHN W. HAYES
PRIMARY EXAMINER